Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for removing DNA contaminants in a genetically recombinant protein-containing sample, which comprises the steps of:

1) adjusting an aqueous solution of the genetically recombinant protein-containing sample to an ionic concentration of 100mM or less and a pH of from 4.0 to the isoelectric point of the protein so as to form particles containing DNA contaminants; and

2) removing the particles resulting from step 1),~~resulting particles.~~

wherein the protein is an antibody or a modified antibody, which has an isoelectric point of above pH 4.0, and

wherein the sample is a culture medium from antibody producing cell culture.

Claims 2-3. (Cancelled)

4. (Currently Amended) The method according to claim 1, wherein the adjusted aqueous solution of step 1) has a conductivity of 300 mS/m or less.

5. (Currently Amended) The method according to claim 1, wherein the adjusted aqueous solution of step 1) is selected from aqueous solutions of hydrochloric acid, citric acid and acetic acid.

Claims 6-7. (Cancelled)

8. (Withdrawn) The method according to claim 1, wherein the impurities are viruses.

9. (Currently Amended) The method according to claim 1, wherein the aqueous solution obtained from step 2) ~~of the genetically recombinant protein-containing sample~~ has the DNA contaminants at a DNA concentration of 22.5 pg/ml or less after the treatment for removal of DNA contaminants.

Claim 10. (Cancelled)

11. (Withdrawn) The method according to claim 10, wherein the antibody is an IgG antibody.

12. (Withdrawn) The method according to claim 10, wherein the antibody is a humanized monoclonal antibody.

13. (Withdrawn) The method according to claim 12, wherein the antibody is a humanized anti-IL-6 receptor antibody.

14. (Withdrawn) The method according to claim 12, wherein the antibody is a humanized anti-HM1.24 antigen monoclonal antibody.

15. (Withdrawn) The method according to claim 12, wherein the antibody is a humanized anti-parathyroid hormone-related peptide antibody (anti-PTHrP antibody).

16. (Withdrawn) The method according to claim 1, wherein the physiologically active protein is granulocyte colony-stimulating factor.

17. (Previously Presented) The method according to claim 1, wherein the particles are removed by filtration through a filter.

18. (Cancelled)

19. (Currently Amended) The method according to claim 1, ~~wherein the genetically recombinant protein is an antibody, and~~ wherein step 1) is accomplished by subjecting the antibody-containing sample to affinity chromatography on Protein A or G, eluting the sample with an acidic aqueous solution having an ionic concentration of 100 mM or less, and adjusting the resulting eluate with a buffer to a pH of from 4.0 to the isoelectric point of the antibody.

20. (Previously Presented) The method according to claim 19 or 23, wherein the buffer is an aqueous solution of Tris.

21. (Withdrawn) A purified physiologically active protein obtainable by the method according to claim 1.

22. (Withdrawn) A method for manufacturing a medical protein formulation, which comprises a purification step in which the method according to claim 1 is used.

Claim 23. (Cancelled)

24. (New) The method according to claim 1, wherein step (1) comprises the steps of:

(a) forming an acidic aqueous solution of the genetically recombinant protein-containing sample having an ionic concentration of 10o mM or less and a pH of 2.0 to 3.9, or an alkaline aqueous solution of the genetically recombinant protein-containing sample having an ionic concentration of 100 mM or less and a pH of 7.5 to 13; and

(b) adjusting the pH of the acidic aqueous solution or the alkaline aqueous solution with a buffer to pH of from 4.0 to the isoelectric point of the protein so as to form particles containing DNA contaminants.